



# **VITALS/MEASUREMENTS INSTALLATION GUIDE**

Version 4.0

April 1997

Department of Veterans Affairs  
Software Service  
Clinical Support Product Line



# Table of Contents

Overview.....	1
Vitals V. 4.0 Installation.....	5
Example - Vitals Installation (Non-virgin install).....	6
Post Initialization Tasks.....	10
File Security.....	10

## Table of Contents

# Installation Guide

## Overview

- In the Package (#9.4) file, this application is known as Gen. Med. Rec. - Vitals. The package namespace is GMRV.
- Nursing V. 4.0, Intake and Output V. 4.0 and Vitals/Measurements V. 4.0 are distributed together and their functionality is linked together. You should install these three packages one immediately after the other in the following order:
  1. Intake and Output V. 4.0 (Refer to the Intake and Output Installation Guide)
  2. Vitals/Measurements V. 4.0
  3. Nursing V. 4.0 (Refer to the Nursing Installation Guide)
- The following describes the installation environment for Version 4.0 of the Vitals/Measurements package:
  1. VA FileMan V. 21 or greater,
  2. Kernel V. 8.0 or greater,
  3. Kernel Toolkit V. 7.3 or greater,
  4. PIMS (MAS) V. 5.3 or greater,
  5. Intake and Output V. 4.0,
  6. Health Summary V. 2.7 or greater.
  7. If you are using Order Entry/Results Reporting (OE/RR), V. 2.5 or greater, the Administration Schedule (#51.1) file of Inpatient Medications V. 4.5 or greater must be installed.
- Sites having made any local modifications to verified Vitals/Measurements routines and/or data dictionaries may have such modifications overwritten. The convention for locally modified or developed routines is to have them stored as namespace\_Z (i.e., GMRVZ\*) routines. The convention for adding fields to the database is that such field numbers are prefixed with the station number followed by three or more other numbers (e.g. 578xxx). Local changes that comply with these conventions are not overwritten during this installation.
- When this version is installed, the names of two files are changed:

<u>File #</u>	<u>Old Name</u>	<u>New Name</u>
120.52	GMRV Vital Site	GMRV Vital Qualifier
120.53	GMRV Vital Quality	GMRV Vital Category

A data conversion is also queued to run from the post-init. When the conversion is completed, the package installer will receive a mail message stating:

```
FILE 120.5 CONVERSION COMPLETED
```

- **Resource Requirements**

1. **Data Entry and Printer Devices:**

The minimal hardware requirements for input and output devices are dependent upon the location in which patient care is provided and the quality of reports generated.

**Input devices:** In an inpatient setting, there should be a sufficient number of data input devices at the point of care, in the nurse's station, physician offices, and conference rooms. Ambulatory Care settings should provide input devices in each clinic room, physician offices, conference rooms, and reception areas.

**Output devices:** The graphic reports (Vitals Graphic Record, blood pressure and weight reports) display data in a linear format when a programmable laser printer is used to print patient information. Printers included in this category:

- a. Have been previously purchased through a central procurement (Kyocera F-800A laser printers).
- b. Are Hewlett-Packard compatible printers (e.g., HP LaserJet III, HP LaserJet 4, HP LaserJet 5, and Epson EPL-8000 printers) that have been purchased by the medical center.

There should be minimally one to two laser printers on an inpatient unit to support this application. Ambulatory care areas should have a printer in both the reception area and a centralized location in each clinic.

2. **Printer Setup Issues:** When using a programmable graphic laser printer, the setups need to be checked, to insure the correct format on the printed page.

The following special printer setup is for Kyocera type printers:

- a. Ensure the existence of a Kyocera entry in the Terminal Type file. This device compresses print and has a margin width of 132 characters. This entry may be exported by Kernel, or you may have to set up your own entry.

- 1) The Name (#.01) field should begin with the characters P-KYOCERA, e.g., P-KYOCERA-P16. This is important as the software will not recognize the device as a Kyocera printer if this Terminal Type entry is not set up properly.
  - 2) The Right Margin (#1) field must be 132.
- b. Create a Device file entry for the Kyocera printer.
- 1) The Name (#.01) field should contain the word KYOCERA. This isn't required, but will make selection of this device by users easier.
  - 2) Sub-Type (#3) field should point to a Terminal Type entry that fits the characteristics defined above in (a-1).
  - 3) Margin Width (#9) field should be 132.
- c. In the Kyocera printer, PRESCRIBE Macro Buffer Size (H0)=99.  
To reprogram your printer,
- 1) **Type:** !R! RES; FRPO H0, 99; EXIT; on your terminal/input device.
  - 2) Print this code on your Kyocera printer (using appropriate print commands). This may be done through a mail message.
  - 3) Turn off the printer for a few seconds, then place the printer back on line (by turning it on). The printer will then be ready to print the linear graphic reports (e.g., SF511).

The following special printer setup is for HP LASERJET III, HP LASERJET 4 and HP LASERJET 5 printers:

- a. Ensure the existence of a HP LASERJET entry in the Terminal Type file. This device compresses print and has a margin width of 132 characters. This entry may be exported by Kernel, or you may have to set up your own entry.
  - 1) The Name (#.01) field should begin with the characters P-HPLASER, e.g., P-HPLASER-L180. This is important as the Vitals/Measurements software will not recognize the device as an HP LASERJET printer if this Terminal Type entry is not set up properly.
  - 2) The Right Margin (#1) field must be 132.
- b. Create a Device file entry for the HP LASERJET printer.

- 1) The Name (#.01) field should contain the word HPLASER. This isn't required, but will make selection of this device by users easier.
- 2) Sub-Type (#3) field should point to a Terminal Type entry that fits the characteristics defined above in (b-1).
- 3) Margin Width (#9) field should be 132.
- 4) Suppress Form Feed at Close (#11.2) field should be set to YES.

Note: If the printer is not set up correctly, it will effect the printed output. KYOCERA and HPLASER are key words in the routine to identify which printer is being used, and IRMS (Information Resource Management Service) must edit the Device file so the word KYOCERA or HPLASER appears in the name of the device (e.g., KYOCERA-PORT).

### 3. Disk Storage:

The following statistics regarding disk storage requirements of this Vitals/Measurements software were compiled by the Alpha/Beta test sites.

<u>Globals</u>	<u>Type of Data</u>	<u>Size</u>
DDs		40 k
GMR	Patient data for the Text Generator, Vitals/Measurements and Intake and Output Modules	25-75 k/ patient
GMRD	Static data for the Text Generator, Vitals/Measurements and Intake and Output Modules	10 k depending on the global efficiency

**Vitals V. 4.0 Installation**

1. Before installation of the Vitals/Measurements software:
  - a. Coordinate the installation with the package ADPAC.
  - b. Schedule downtime with the users of the package. Since the installation will put the GMRV namespace options out-of-service for the duration of the install, the system does not have to be down during the installation.
  - c. Backup the system.
  - d. Disable routine mapping and journaling if appropriate. MSM sites should not turn journaling off, but should monitor journal space being used during the installation.
  - e. Set variables DUZ and DUZ(0)="@" by executing the following command D ^XUP.
2. (Optional) Sites may delete any old vitals/measurements routines (GMRV\*), not including local routines GMRVZ\*, from the system.

## Example - Vitals Installation (Non-virgin install)

> D ^XUP

Setting up programmer environment  
Terminal Type set to: **C-VT100**

Select OPTION NAME: **XPD MAIN**                    Kernel Installation & Distribution  
System

Edits and Distribution ...  
Utilities ...  
Installation ...

Select Kernel Installation & Distribution System Option: **INSTALLATION**

- 1      Load a Distribution
- 2      Verify Checksums in Transport Global
- 3      Print Transport Global
- 4      Compare Transport Global to Current System
- 5      Backup a Transport Global
- 6      Install Package(s)  
        Restart Install of Package(s)  
        Unload a Distribution

Select Installation Option: **LOAD** a Distribution  
Enter a Host File: **VITL4.KID**

KIDS Distribution saved on Feb 07, 1997@12:43:01  
Comment: GEN. MED. REC. - VITALS 4.0

This Distribution contains Transport Globals for the following Package(s):  
    GEN. MED. REC. - VITALS 4.0

Want to Continue with Load? YES// **<RET>**  
Loading Distribution...

Want to RUN the Environment Check Routine? YES// **<RET>**  
    GEN. MED. REC. - VITALS 4.0  
Will first run the Environment Check Routine, GMRVXENV

Use INSTALL NAME: **GEN. MED. REC. - VITALS 4.0** to install this Distribution.

- 1      Load a Distribution
- 2      Verify Checksums in Transport Global
- 3      Print Transport Global
- 4      Compare Transport Global to Current System
- 5      Backup a Transport Global
- 6      Install Package(s)  
        Restart Install of Package(s)  
        Unload a Distribution

Select Installation Option: **6** Install Package(s)

Select INSTALL NAME: **GEN. MED. REC. - VITALS 4.0** Loaded from Distribu  
tion 2/7/97@12:46:20  
=> GEN. MED. REC. - VITALS 4.0 ;Created on Feb 07, 1997@12:43:01

This Distribution was loaded on Feb 07, 1997@12:46:20 with header of  
GEN. MED. REC. - VITALS 4.0 ;Created on Feb 07, 1997@12:43:01  
It consisted of the following Install(s):  
GEN. MED. REC. - VITALS 4.0

GEN. MED. REC. - VITALS 4.0  
Will first run the Environment Check Routine, GMRVXENV

Install Questions for GEN. MED. REC. - VITALS 4.0

120.5 GMRV VITAL MEASUREMENT  
Note: You already have the 'GMRV VITAL MEASUREMENT' File.

120.51 GMRV VITAL TYPE (including data)  
Note: You already have the 'GMRV VITAL TYPE' File.  
I will OVERWRITE your data with mine.

120.52 GMRV VITAL QUALIFIER (including data)  
\*BUT YOU ALREADY HAVE 'GMRV VITAL SITE' AS FILE #120.52!  
Shall I write over your GMRV VITAL SITE File? YES// <RET>  
Data will NOT be added.

120.53 GMRV VITAL CATEGORY (including data)  
\*BUT YOU ALREADY HAVE 'GMRV VITAL QUALITY' AS FILE #120.53!  
Shall I write over your GMRV VITAL QUALITY File? YES// <RET>  
Data will NOT be added.

120.55 GMRV ORDERS  
Note: You already have the 'GMRV ORDERS' File.

120.57 GMRV VITALS PARAMETERS (including data)  
Note: You already have the 'GMRV VITALS PARAMETERS' File.  
Data will NOT be added.

Want to overwrite the package's file security codes? ?

Answer NO if you do not want to change the file security codes.  
Answer YES to overwrite the package's file security codes with mine.

Want to overwrite the package's file security codes? **YES**

Want to DISABLE Scheduled Options, Menu Options, and Protocols? YES// <RET>

Enter options you wish to mark as 'Out Of Order': <RET>

Enter protocols you wish to mark as 'Out Of Order': <RET>

## Installation Guide

Delay Install (Minutes): (0-60): 0// <RET>

Enter the Device you want to print the Install messages.  
You can queue the install by enter a 'Q' at the device prompt.  
Enter a '^' to abort the install.

DEVICE: HOME// **Enter appropriate device**

Install Started for GEN. MED. REC. - VITALS 4.0 :  
Feb 07, 1997@12:48:15

Installing Routines:  
Feb 07, 1997@12:48:47

Running Pre-Install Routine: ^GMRVXPRES

Deleting \*COMMENTS field from 120.5 file...

Converting HELP FRAME data in 120.51 file...

Changing name of file #120.52 to GMRV VITAL QUALIFIER

Changing name of file #120.53 to GMRV VITAL CATEGORY

Deleting "AA" xref for .01 field of 120.5 file...

Deleting "AZ1" xref for .02 field of 120.5 file...

Deleting "AZ2" xref for .03 field of 120.5 file...

Removing WRITE ACCESS for .01 field of 120.53 file/sub-file...

Removing DELETE ACCESS for .01 field of 120.53 file/sub-file...

Removing WRITE ACCESS for 1 field of 120.53 file/sub-file...

Removing DELETE ACCESS for .01 field of 120.531 file/sub-file...

Running Qualifier/Category Conversion...

Installing Data Dictionaries:  
Feb 07, 1997@12:49:18

Installing Data:  
Feb 07, 1997@12:49:23

Installing PACKAGE COMPONENTS:

Installing HELP FRAME

Installing INPUT TEMPLATE

Installing PROTOCOL  
Located in the GMRV (GEN. MED. REC. - VITALS) namespace.  
Located in the GMRV (GEN. MED. REC. - VITALS) namespace.  
Located in the GMRV (GEN. MED. REC. - VITALS) namespace.

Installing OPTION  
Feb 07, 1997@12:50:11

```
Running Post-Install Routine: ^GMRVXPST
Adding new categories to 120.53 file...
Re-indexing 120.53 file...
Adding new qualifiers to 120.52 file...
Re-indexing 120.52 file...
Data conversion queued to run in the background
Setting Vitals/Measurements file security...
Updating Routine file...
Updating KIDS files...
GEN. MED. REC. - VITALS 4.0 Installed.
                Feb 07, 1997@12:50:31..

Install Message sent #7915

Install Completed
```

### Post Initialization Tasks

1. There are no security keys exported with the Vitals/Measurements software.
2. The following routines should be mapped on all CPUs using the MAS system: GMRVED\*.
3. The following globals should be journaled and appear in the UCI translation table for each CPU: GMR\*
4. Move the GMRV\* routines onto all appropriate systems, if applicable.
5. For information on assigning menus, refer to page 1.2 in Chapter 1 Implementation and Maintenance of the Vitals/Measurements User Manual.

### File Security

NUMBER	NAME	GLOBAL NAME	DD ACC	RD ACC	WR ACC	DEL ACC	LAY ACC
120.5	GMRV VITAL MEASUREMENT	^GMR(120.5,	@		@	@	@
120.51	GMRV VITAL TYPE	^GMRD(120.51,	@		@	@	@
120.52	GMRV VITAL QUALIFIER	^GMRD(120.52,	@		@	@	@
120.53	GMRV VITAL CATEGORY	^GMRD(120.53,	@		@	@	@
120.55	GMRV ORDERS	^GMR(120.55,	@		@	@	@
120.57	GMRV VITALS PARAMETERS	^GMRD(120.57,	@		@	@	@